

**Amendments to the Claims:**

What is claimed is:

Claim 1 (Currently amended): A method for ~~measuring potential tumorigenicity of~~  
assaying mammalian cells to determine if tumor cells are present, comprising:

- a. providing a sample of medium surrounding said mammalian cells, and
- b. detecting the presence of a 120-130kD fragment of  $\alpha$ -dystroglycan in the  
medium, ~~said fragment having an Mr of 120-130kD~~, whereby the presence of the  
fragment indicates that tumor cells are present ~~higher potential tumorigenicity~~.

Claim 2 (Currently amended): The method of claim 1, wherein said detecting comprises:

- a. adding to said sample a material selected from the group consisting of a  
monoclonal antibody to  $\alpha$ -dystroglycan ~~and laminin~~, and
- b. measuring that the size of the  $\alpha$ -dystroglycan fragment is 120-130kD  
~~detected~~.

Claim 3 (Currently amended): The method of claim 1, wherein said mammalian cells are  
human mammary epithelial cells.

Claim 4 (Original): The method of claim 1, wherein said medium is blood serum.

Claim 5 (Currently amended): A method for measuring ~~potential~~ tumorigenicity of cells,  
comprising:

- a. providing a sample of said cells, ~~and~~
- b. detecting the presence of  $\alpha$ -dystroglycan on the surface of said cells,

- c. providing a normal value for  $\alpha$ -dystroglycan expression levels on cell surfaces; and
- d. comparing the detection levels of  $\alpha$ -dystroglycan to said normal value,  
whereby ~~the absence~~ a decrease in levels of  $\alpha$ -dystroglycan on said cells of the sample indicates a higher potential for tumorigenicity.

Claim 6 (Currently amended): The method of claim 5, wherein said detecting comprises:

- a. adding to said sample a monoclonal antibody specific for  $\alpha$ -dystroglycan,  
and
- b. measuring the amount of labeled  $\alpha$ -dystroglycan detected.

Claim 7 (Original): The method of claim 5, wherein said cells are human mammary epithelial cells.

Claim 8 (Currently amended): The method of claim 5, wherein the step of providing a normal value comprises measuring said detecting comprises measurement of the amount of  $\alpha$ -dystroglycan relative to the amount of  $\beta$ -dystroglycan on the surface of said cells,  
wherein a relative decrease in the ratio of  $\alpha$ -dystroglycan to  $\beta$ -dystroglycan indicates  $\alpha$ -dystroglycan shedding and higher potential tumorigenicity.

Claims 9 – 21 (Withdrawn).

Claim 22 (Currently amended): A method of determining the likelihood that a patient has a tumor, by assaying proteolysed  $\alpha$ -dystroglycan fragments ~~shed from a cell into blood in~~ patient serum, said method comprising the steps of:

a. contacting a serum sample to be assayed with a labeled antibody specific for an  $\alpha$ -dystroglycan ~~fragment~~, and  
b. assaying the amount of bound label,  
whereby wherein said  $\alpha$ -dystroglycan ~~fragments~~ bound to said labeled antibody ~~are~~  
is positively correlated with existence of a tumor cell growth in the patient.

Claim 23 (Currently amended): The method of Claim 22, wherein the  $\alpha$ -dystroglycan ~~fragment~~ is ~~an~~ a fragment of approximately 120 kD fragment.

Claim 24 (Currently amended): The method of Claim 22, wherein the  $\alpha$ -dystroglycan ~~fragment~~ is ~~an~~ a fragment of approximately 60 kD fragment.

Claims 25 – 28 (Withdrawn).

Claim 29 (Currently amended): The method of claim 22, wherein said tumor cell is an epithelial cell tumor.

Claim 30 (Currently amended): The method of claim 29, wherein said epithelial cell tumor is a breast epithelial cell tumor.